

Serial No. 09/976, 067

In the Claims

This listing of the claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method of making electrically conductive bumps of improved height on a semiconductor device comprising:

depositing an under bump metallurgy over a semiconductor device having a contact pad and thereon and a passivation layer as an upper surface of the semiconductor device and an opening formed in the passivation layer down to the contact pad so that the under bump metallurgy extends into the opening and onto the contact pad;

depositing, developing and patterning a photoresist layer over the semiconductor device to provide an opening over the under bump metallurgy and aligned with the contact pad;

depositing a first electrically conductive material into the opening in the photoresist layer;

depositing a second electrically conductive material over the first electrically conductive material and over a portion of the photoresist layer;

removing the photoresist layer;

removing excess under bump metallurgy to leave a portion of the under bump metallurgy overlying the contact pad and underneath the first electrically conductive material;

applying a flux agent to the top surface of the second electrically conductive material;

heating the semiconductor device to remove any oxide on the second electrically conductive material;

OK to enter
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